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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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PHAM, MICHAEL				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/647,058

Applicant(s)

THOMPSON ET AL.

Examiner

MICHAEL PHAM

Art Unit

2167

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-20, 23 and 37-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-20, 23 and 37-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date _____
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/2/09 has been entered.

Claim Status

2. Claims 1-11, 13-20, 23, and 37-48 are pending and examined.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1, 37, and 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. the specifications only mentions that the kernel “the hardware/software interface system component 204 comprises an operating system that itself comprises, in most cases a shell and a kernel” (0065, Applicant’s specification); “in contrast to a shell, a kernel is a hardware/software interface system’s innermost layer that interacts directly with the hardware components.”(0068, Applicant’s specification); and “An operating system (OS) is a special program that acts as an intermediary between application programs and computer hardware. An operating system comprises, in most cases, a shell and a kernel” (0076, Applicant’s specification). No where does it state that the “kernel mode of the operating system including instructions for a database management program”. There’s no support for the new claimed limitation.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Prior rejection 37-42 are withdrawn.

8. Regarding claims 43-48 these claims recite a 'computer readable storage medium' and 'processor'. In the absence of any modifying disclosure of this limitation in the specification, the examiner interprets the terms 'computer readable storage medium' as excluding printed paper, transmission media, signals, or any form of energy, and the term 'processor' as limited to hardware embodiments, such that the claim clearly falls within a statutory class of invention as required under the terms of 35 U.S.C. 101.

9. Regarding claims 1-11, 13-20, 23 these claims recite a 'computer readable storage medium' and 'processor'. In the absence of any modifying disclosure of this limitation in the specification, the examiner interprets the terms 'computer readable storage medium' as excluding printed paper, transmission media, signals, or any form of energy, and the term 'processor' as limited to hardware embodiments, such that the claim clearly falls within a statutory class of invention as required under the terms of 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1, 37, and 43 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6018342 by David Bristor (hereafter Bristor) further in view of U.S. Patent**

**7158962 by Kenneth Nelson (hereafter Nelson) and U.S. Patent Application Publication
20050033777 by Moraes et. al. (hereafter Moraes).**

Claim 1:

Bristor discloses the following claimed limitations:

“A computer system comprising:

a processor coupled to a computer readable storage medium, the computer readable storage medium including” [figure 6, computer system]

“instructions for an operating system including a kernel mode and a user mode”(col. 1 line 30, unix. It is noted that an operating system including a kernel mode and a user mode is well known.)”, the operating system including instructions for a database management program” [col. 1 line 30, unix. col. 7 line 51, classifying user data; col. 8 lines 1-8, window 102 also includes history buttons, each of which is a virtual button corresponding to a letter of the alphabet. For example, history buttons 108L and 108M correspond to the letters L and M, respectively. In accordance with the present invention an organization scheme which is symbolic and with which users are already familiar is used in a novel manner to categorize previously generated user data. Accordingly, operating system (col. 1 line 30, unix) including instructions for a database management program (Figure 1B element 102).]

“; the instructions for the database management program integrated with instructions for a file system,” [col. 8 lines 41-50, Fig. 1B, the only command which includes a component whose initial letter is L is the command ls mystuff.*. Accordingly the only item included in history menu 112L represents the command ls mystuff.*. To retrieve and re-enter the command ls mystuff.* the user selects the only item from history menu 112L as described more completely

below. In response to the selection item by the user, the command `Ls mystuff.*` is retrieved from a history database, which is described in greater detail below and is processed as if the user had entered the command using conventional techniques. Accordingly the instructions for the database management program (fig. 1B, command prompt) integrated with instructions for the 10file system (`ls mystuff.*`).]

“the file system configured to store file data as filestreams” [figure 1, `mystuff`; `mystuff.txt`, `mystuff.dat` `mystuff.c`. Accordingly, the file system (`mystuff` e.g. file system containing files) configured to store file data as file streams (`mystuff.txt`, `mystuff.dat`, `mystuff.c`)] “and the database management program is configured to generate Items from the file data” [figure 1b elements 112L, Accordingly, the database management program (figure 1B, command prompt) is configured to generate Items (112L) from the file data (`mystuff`)]

“and expose the Items to a shell of the operating system,” [figure 1B, Accordingly, expose (figure 1B) the Items (112 commands) to a shell of the operating system (col. 8 lines 41-50, processed as if user had entered the command)]

“the Items constituting discrete storable units of information;”[figure 1B element 112L]

“the instructions for the database management program further including instructions for generating a plurality of Item Folders that constitute an organizational structure for said Items”[figure 1B 108. Accordingly, the instructions for the database management program (figure 1B, command prompt, 102) further including instructions for generating a plurality of Item Folders (figure 1B element 108) that constitute an organizational structure for said Items (figure 1B element 108M)]

“and each Item Folder includes membership information identifying any relationships with Items;”[figure 1B element 108; col. 8 lines 4-8, in accordance with the present invention, an organization scheme which is symbolic and with which users are already familiar is used in a novel manner to categorize previously generated user data. Accordingly, each Item Folder (108) includes membership information (fig. 1B, M) identifying any relationships with Items (fig. 1B, 112)]

“the instructions for the database management program including instructions for generating a plurality of Categories that constitute an additional organizational structure for said Items,” [abstract lines 3-8, regeneration in a history database in one of two or more categories associated with two or more respective component symbols of the user data. For example, in one embodiment, user data includes alphabetic symbols and a respective category is formed for each letter of the alphabet. Accordingly, the instructions for the database management program including instructions for generating a plurality of Categories (Categories) that constitute an additional organizational structure (respective category is formed for each letter of the alphabet) for said Items (user data/commands/112)]

“at least one of said Items belonging to at least one of the Categories,” [figure 1B element 112L] “wherein each Item in a specific Category includes a common attribute that is described for that specific Category” [figure 1C elements 112MA-C, 108M]

Bristor does not explicitly disclose “, wherein the Item Folders are themselves Items” and “Categories are themselves Items”.

On the other hand, Nelson discloses “wherein the Item Folders are themselves Items” (col. 3 lines 59-60, items can be for example folder or a document), and “Categories are themselves items” (col. 1 lines 38-42, each item may exist as the source and/or target.)

Bristor and Nelson are both within the same field of endeavor as applicant's invention, as they are both systems of organization. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Nelson's disclosure above to Bristor for the purpose of further categorizing and organizing items.

Bristor and Nelson do not explicitly “the kernel mode of the” operating system including instructions for a database management program.

On the other hand, Moraes discloses “the kernel mode of the operating system” (figure 2) “including instructions for a database management system” (0046, lines 19-21).

Bristor, Nelson, and Moraes are all directed to manipulating data files. Therefore all are within applicant's same field of endeavor. The combination of Bristor and Nelson merely did not explicitly disclose “the kernel mode of the” operating system including instructions for a database management program. However, Moraes discloses this as above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Langford's disclosure above to the combination of Bristor and Nelson for the purpose of

receiving user data, perform data access, and start other processes such as data modification processes, 0046 lines 19-21.

Claim 37 :

Bristor discloses the following claimed limitations: “A method comprising:

executing an operating system including a kernel mode and a user mode,” [col. 1 line 30 unix. It is noted that an operating system including a kernel mode and user mode is well known.] “operating system including a database management program,”[col. 1 line 30, unix. Col. 7 lines 51, classifying user data; col. 8 lines 1-8; and figure 1B. Accordingly, operating system including instructions for a database management program (figure 1B element 102)] “the database management program integrated with a file system;”[Col. 8 lines 41-50. Accordingly, the database management program (figure 1B) integrated with a file system (mystuff.*)]

“storing, by the file system, file data;”[figure 1, mystuff, mystuff.txt, mystuff.dat, mystuff.c. Accordingly, the storing, by the file system (mystuff e.g. file system containing files), file data (mystuff.txt, mystuff.dat, mystuff.c)]

“generating, by the database management program, Items from the file data managing, wherein each Item of said plurality of items constitutes a discrete unit of information;” [Figure 1. Accordingly, generating, by the database management program (figure 1B), Items from the file data managing (Figure 1B element 112L), wherein each Item of said plurality of items constitutes a discrete unit of information (figure 1B element 112L)]

“generating, by the database management program from the file data, Item Folders, the Item Folders constituting managing, an organizational structure for said Items,” [Accordingly,

generating, by the database management program (figure 1B) from the file data (figure 1B, mystuff), Item Folders (Figure 1B element 108), the Item Folders constituting managing (figure 1B element 108), an organizational structure for said Items (figure 1B element 108)]

“exposing, by the database management program, the Items and the Item Folders to a shell of the operating system.”[Figure 1B. Accordingly exposing (col. 8 line 44, to retrieve and re-enter command), by the database management program (figure 1B element 102), the Items (112L) and the Item folders (figure 1B 108) to a shell of the operating system (col. 10 line 64, c-shell)]

Bristor does not explicitly disclose “wherein the Item Folders are a type of Item”

On the other hand, Nelson discloses “wherein the Item Folders are a type of Item” (col. 3 lines 59-60, items can be for example folder or a document; col. 1 lines 38-42, each item may exist as the source and/or target). Bristor and Nelson are both within the same field of endeavor as applicant's invention, as they are both systems of organization. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Nelson's disclosure above to Bristor for the purpose of further categorizing and organizing items.

The combination of Bristor and Nelson do not explicitly “the kernel mode of the” operating system including instructions for a database management program.

On the other hand, Moraes discloses “the kernel mode of the operating system” (figure 2) “including instructions for a database management system” (0046, lines 19-21).

Bristor, Nelson, and Moraes are all directed to manipulating data files. Therefore all are within applicant’s same field of endeavor. The combination of Bristor and Nelson merely did not explicitly disclose “the kernel mode of the” operating system including instructions for a database management program. However, Moraes discloses this as above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Langford’s disclosure above to the combination of Bristor and Nelson for the purpose of receiving user data, perform data access, and start other processes such as data modification processes, 0046 lines 19-21.

Claim 43 :

Bristor discloses the following claimed limitations “A computer-readable storage medium including processor executable instructions comprising:

instructions for an operating system including a kernel mode and a user mode of the operating system,” [col. 1 line 30 unix. It is noted that an operating system including a kernel mode and user mode is well known.]

“operating system including instructions for a database management program,”[col. 1 line 30, unix. Col. 7 lines 51, classifying user data; col. 8 lines 1-8; and figure 1B. Accordingly, operating system (unix) including instructions for a database management program (figure 1B element 102)] “the instructions for the database management program integrated with

instructions for a file system;” [Col. 8 lines 41-50. Accordingly, the database management program (figure 1B) integrated with a file system (mystuff.*)]

“instructions for storing, by the file system, file data;” [figure 1, mystuff; mystuff.txt, mystuff.dat, mystuff.c. Accordingly, instructions for storing, by the file system(mystuff, e.g. file system containing files), file data (mystuff.txt, mystuff.dat, mystuff.c)]

“instructions for generating, by the instructions for the database management program, a plurality of Items, said Item comprising a discrete unit of information from the file data;”[Figure 1B. Accordingly, instructions for generating, by the instructions for the database management program (figure 1B), a plurality of Items (112L), said Item comprising a discrete unit of information from the file data (112L)]

“instructions for generating, by the instructions for the database management program, a plurality of Item Folders from the file data, the Item Folders including membership information identifying any relationships with Items and” [Figure 1B. Accordingly, instructions for generating, by the instructions for the database management program (figure 1B), a plurality of Item Folders (figure 1B element 108) from the file data (figure 1B mystuff), the Item Folders (figure 1B element 108) including membership information identifying any relationships with Items (figure 1B element 108)]

“instructions for generating, by the instructions for the database management program, a plurality of Categories from the file data, the Categories constituting an organizational structure for said Items;”[Figure 1Binstructions for generating, by the instructions for the database management program(figure 1B element 102), a plurality of Categories (figure 1B, A-Z) from

the file data (figure 1B is mystuff), the Categories (figure 1B, A-Z) constituting an organizational structure (alphabetical) for said Items (figure 1B 112L)]

“instructions for exposing, by the database management program, the Items to a shell of the operating system.” [Figure 1B. Accordingly instructions for exposing (col. 8 line 44, to retrieve and re-enter command), by the database management program (figure 1B element 102), the Items (112L) to a shell of the operating system (col. 10 line 64, c-shell)]]

Bristor does not explicitly disclose “the Item Folders are themselves a type of Item”

On the other hand, Nelson discloses “wherein the Item Folders are a type of Item” (col. 3 lines 59-60, items can be for example folder or a document; col. 1 lines 38-42, each item may exist as the source and/or target). Bristor and Nelson are both within the same field of endeavor as applicant's invention, as they are both systems of organization. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Nelson's disclosure above to Bristor for the purpose of further categorizing and organizing items.

The combination of Bristor and Nelson do not explicitly “the kernel mode of the” operating system including instructions for a database management program.

On the other hand, Moraes discloses “the kernel mode of the operating system” (figure 2) “including instructions for a database management system” (0046, lines 19-21).

Bristor, Nelson, and Moraes are all directed to manipulating data files. Therefore all are within applicant's same field of endeavor. The combination of Bristor and Nelson merely did not explicitly disclose "the kernel mode of the" operating system including instructions for a database management program. However, Moraes discloses this as above. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Langford's disclosure above to the combination of Bristor and Nelson for the purpose of receiving user data, perform data access, and start other processes such as data modification processes, 0046 lines 19-21.

12. Claims 2-3, 5, 7-8, 10, 38, 39, 41, 44, 45, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6018342 by David Bristor (hereafter Bristor) further in view of U.S. Patent 7158962 by Kenneth Nelson (hereafter Nelson), U.S. Patent Application Publication 20050033777 by Moraes et. al. (hereafter Moraes), and U.S. Patent Application Publication 2004/0199521 by Anglin et. al (hereafter Anglin).

Claim 2 :

Bristor, Nelson, and Moraes do not explicitly disclose "wherein an Item is a member of an Item Folder but is not owned by said Item Folder, such that the deletion of said Item Folder does not automatically result in the deletion of said Item."

On the other hand, Anglin discloses "wherein an Item is a member of an Item Folder but is not owned by said Item Folder, such that the deletion of said Item Folder does not automatically result in the deletion of said Item." (See page 3, paragraph [0028] "The secondary deletion ensure that a storage object and corresponding storage object entry are only removed if

the storage object is not a member of any further groups after eliminating the relationship between the storage object and group i.” This follows the request to delete the “group leader” which represents the group ID of the “storage group” or the “Item Folder” as in referred to in the claim.)

Bristor, Nelson, Moraes, and Anglin are all directed to the same field of endeavor as applicant’s invention, as they are systems of organization and management. It would have been obvious to a person of an ordinary skill in the art at the time the invention was disclosed to have applied Anglin’s disclosure above to the combination of Bristor, Nelson, and Moraes for the purpose of providing a removal method for the item.

Claim 3 :

Bristor, Nelson, and Moraes do not explicitly disclose “wherein an Item is automatically deleted when it no longer belongs to any Item Folder.”

On the other hand, Anglin discloses “wherein an Item is automatically deleted when it no longer belongs to any Item Folder.” (See page 3, paragraph [0029] “If the target group is the only indicated group in the associated groups fields for the specified storage object entry, then the storage management server deletes the specified storage object entry from the storage database and deletes the identifier of the deleted storage object entry from the group entry for the target group.”)

Bristor, Nelson, Moraes, and Anglin are all directed to the same field of endeavor as applicant’s invention, as they are systems of organization and management. It would have been obvious to a person of an ordinary skill in the art at the time the invention was disclosed to have

applied Anglin's disclosure above to the combination of Bristor, Nelson, and Moraes for the purpose of providing a removal method for the item.

Claim 5 :

The combination of Bristor, Nelson, and Moraes do not explicitly disclose "wherein said Item is automatically deleted when it is a member of only one Item Folder and said Item Folder is deleted."

On the other hand, Anglin discloses "wherein said Item is automatically deleted when it is a member of only one Item Folder and said Item Folder is deleted." (See page 3, paragraph [0028] "The secondary deletion ensure that a storage object and corresponding storage object entry are only removed if the storage object is not a member of any further groups after eliminating the relationship between the storage object and group i." This follows the request to delete the "group leader" which represents the group ID of the "storage group" or the "Item Folder" as in referred to in the claim.)

Bristor, Nelson, Moraes, and Anglin are all directed to the same field of endeavor as applicant's invention, as they are systems of organization and management. It would have been obvious to a person of an ordinary skill in the art at the time the invention was disclosed to have applied Anglin's disclosure above to the combination of Bristor, Nelson, and Moraes for the purpose of providing a removal method for the item.

Claim 7 :

Bristor, Nelson, and Moraes do not explicitly disclose “wherein each Item is a member of at least one Item Folder but is not owned by said Item Folder, such that the deletion of said Item Folder does not automatically result in the deletion of an Item.”

Anglin discloses “wherein each Item is a member of at least one Item Folder but is not owned by said Item Folder, such that the deletion of said Item Folder does not automatically result in the deletion of an Item.” (See page 3, paragraph [0028] “The secondary deletion ensure that a storage object and corresponding storage object entry are only removed if the storage object is not a member of any further groups after eliminating the relationship between the storage object and group i.” This follows the request to delete the “group leader” which represents the group ID of the “storage group” or the “Item Folder” as in referred to in the claim.)

Bristor, Nelson, Moraes and Anglin are all directed to the same field of endeavor as applicant’s invention, as they are systems of organization and management. It would have been obvious to a person of an ordinary skill in the art at the time the invention was disclosed to have applied Anglin’s disclosure above to the combination of Bristor, Nelson, and Moraes for the purpose of providing a removal method for the item.

Claim 8 :

Bristor, Nelson, and Moraes do not explicitly disclose “wherein each said Item is itself automatically deleted when it no longer belongs to any Item Folder.”

Anglin discloses “wherein each said Item is itself automatically deleted when it no longer belongs to any Item Folder.” (See page 3, paragraph [0029] “If the target group is the only indicated group in the associated groups fields for the specified storage object entry, then the storage management server deletes the specified storage object entry from the storage database and deletes the identifier of the deleted storage object entry from the group entry for the target group.”)

Bristor, Nelson, Moraes and Anglin are all directed to the same field of endeavor as applicant’s invention, as they are systems of organization and management. It would have been obvious to a person of an ordinary skill in the art at the time the invention was disclosed to have applied Anglin’s disclosure above to the combination of Bristor, Nelson, and Moraes for the purpose of providing a removal method for the item.

Claim 10 :

Bristor, Nelson, and Moraes do not explicitly disclose “wherein each said Item is itself automatically deleted when it is a member of only one Item Folder and said Item Folder is deleted.”

Anglin discloses “wherein each said Item is itself automatically deleted when it is a member of only one Item Folder and said Item Folder is deleted.” (See page 3, paragraph [0028] “The secondary deletion ensure that a storage object and corresponding storage object entry are only removed if the storage object is not a member of any further groups after eliminating the relationship between the storage object and group i.” This follows the request to delete the “group leader” which represents the group ID of the “storage group” or the “Item Folder” as in referred to in the claim.)

Bristor, Nelson, Moraes, and Anglin are all directed to the same field of endeavor as applicant's invention, as they are systems of organization and management. It would have been obvious to a person of an ordinary skill in the art at the time the invention was disclosed to have applied Anglin's disclosure above to the combination of Bristor, Nelson, and Moraes for the purpose of providing a removal method for the item.

Claim 38 :

Bristor, Nelson, and Moraes do not explicitly disclose "wherein at least one Item is a member of an Item Folder but is not owned by said Item Folder, such that the deletion of said Item Folder does not automatically result in the deletion of said at least one Item."

Anglin discloses "wherein at least one Item is a member of an Item Folder but is not owned by said Item Folder, such that the deletion of said Item Folder does not automatically result in the deletion of said at least one Item." (See page 3, paragraph [0028] "The secondary deletion ensure that a storage object and corresponding storage object entry are only removed if the storage object is not a member of any further groups after eliminating the relationship between the storage object and group i." This follows the request to delete the "group leader" which represents the group ID of the "storage group" or the "Item Folder" as in referred to in the claim.)

Bristor, Nelson, Moraes, and Anglin are all directed to the same field of endeavor as applicant's invention, as they are systems of organization and management. It would have been obvious to a person of an ordinary skill in the art at the time the invention was disclosed to have

applied Anglin's disclosure above to the combination of Bristor, Nelson, and Moraes for the purpose of providing a removal method for the item.

Claim 39 :

The combination of Bristor, Nelson, Moraes, and Anglin disclose in Anglin "wherein the at least one Item is automatically deleted when it no longer belongs to any Item Folder." (See page 3, paragraph [0029] "If the target group is the only indicated group in the associated groups fields for the specified storage object entry, then the storage management server deletes the specified storage object entry from the storage database and deletes the identifier of the deleted storage object entry from the group entry for the target group.")

Claim 41 :

The combination of Bristor, Nelson, Moraes, and Anglin disclose in Anglin "The method of claim 38 wherein the at least one Item is automatically deleted when it is a member of only one Item Folder and said Item Folder is deleted." (See page 3, paragraph [0028] "The secondary deletion ensure that a storage object and corresponding storage object entry are only removed if the storage object is not a member of any further groups after eliminating the relationship between the storage object and group i." This follows the request to delete the "group leader" which represents the group ID of the "storage group" or the "Item Folder" as in referred to in the claim.)

Claim 44 :

Bristor, Nelson, and Moraes do not explicitly disclose “wherein at least one Item is a member of an Item Folder but is not owned by said Item Folder, such that the deletion of said Item Folder does not automatically result in the deletion of said Item.”

Anglin discloses “wherein the Item is a member of an Item Folder but is not owned by said Item Folder, such that the deletion of said Item Folder does not automatically result in the deletion of said Item.” (See page 3, paragraph [0028] “The secondary deletion ensure that a storage object and corresponding storage object entry are only removed if the storage object is not a member of any further groups after eliminating the relationship between the storage object and group i.” This follows the request to delete the “group leader” which represents the group ID of the “storage group” or the “Item Folder” as in referred to in the claim.)

Bristor, Nelson, Moraes, and Anglin are all directed to the same field of endeavor as applicant’s invention, as they are systems of organization and management. It would have been obvious to a person of an ordinary skill in the art at the time the invention was disclosed to have applied Anglin’s disclosure above to the combination of Bristor, Nelson, and Moraes for the purpose of providing a removal method for the item.

Claim 45 :

The combination of Bristor, Nelson, Moraes, and Anglin disclose in Anglin “The computer-readable medium of claim 44 wherein the at least one Item is automatically deleted when it no longer belongs to any Item Folder” (See page 3, paragraph [0029] “If the target group is the only indicated group in the associated groups fields for the specified storage object entry, then the storage management server deletes the specified storage object entry from the storage database

and deletes the identifier of the deleted storage object entry from the group entry for the target group.”).

Claim 47 :

The combination of Bristor, Nelson, Moraes, and Anglin disclose in Anglin “The computer-readable medium of claim 44 wherein the at least one Item is automatically deleted when it is a member of only one Item Folder and said Item Folder is deleted.” (See page 3, paragraph [0028] “The secondary deletion ensure that a storage object and corresponding storage object entry are only removed if the storage object is not a member of any further groups after eliminating the relationship between the storage object and group i.” This follows the request to delete the “group leader” which represents the group ID of the “storage group” or the “Item Folder” as in referred to in the claim.)

13. Claims 4, 6, 9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6018342 by David Bristor (hereafter Bristor) further in view of U.S. Patent 7158962 by Kenneth Nelson (hereafter Nelson), U.S. Patent Application Publication 20050033777 by Moraes et. al. (hereafter Moraes), and U.S. Patent Application Publication 2004/0073560 by Edwards (hereafter Edwards).

Claim 4 :

The combination of Bristor, Nelson, and Moraes do not explicitly disclose “wherein an Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder.” On the other hand, Edwards teaches more explicitly an Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder.

(See page 3, paragraph [0038] “The synchroniser can be set to ‘Recycle’ rather than delete files. This means that whenever the synchroniser is to over-write or delete a file, the file is passed to the operating system to be ‘recycled’. This means it is not deleted immediately, but stored in an area where it can be retrieved if required.” In the instant application, the area in which the item is stored is called the default Item Folder). It would have been obvious to one with ordinary skill in the art to combine the Item and Item folder system of Bristor, Nelson, and Moraes with the disclosure of a recycling method of Edwards by simply adding the recycling method of Edwards to the system of Bristor, Nelson, and Moraes. Edwards points out the advantage of keeping the potentially deleted file (or in the instant application, the object,) available for future use rather than immediate deletion. It is for this reason that one of ordinary skill in the art would have been motivated to have an Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder.

Claim 6 :

Bristor, Nelson, and Moraes do not explicitly disclose “said Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder.” However, Edwards teaches said Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder. (See page 3, paragraph [0038] “The synchroniser can be set to ‘Recycle’ rather than delete files. This means that whenever the synchroniser is to over-write or delete a file, the file is passed to the operating system to be ‘recycled’. This means it is not deleted immediately, but stored in an area where it can be retrieved if required.” In the instant application, the area in which the item is

stored is called the default Item Folder.) It would have been obvious to one with ordinary skill in the art to combine the Item and Item folder system of Bristor, Nelson, and Moraes with the disclosure of a recycling method of Edwards by simply adding the recycling method of Edwards to the system of Bristor, Nelson, and Moraes. Edwards points out the advantage of keeping the potentially deleted file (or in the instant application, the object,) available for future use rather than immediate deletion. It is for this reason that one of ordinary skill in the art would have been motivated to have said Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder.

Claim 9 :

Bristor, Nelson, and Moraes do not explicitly teach “each said Item, when each no longer belongs to any Item Folder, automatically become members of a default Item Folder.” Nelson does disclose col. 5 lines 54-56, No folder exists matching these attributes. Consequently, the library server 25 creates a folder with the following attributes. However, Edwards more explicitly teaches each said Item, when each no longer belongs to any Item Folder, automatically become members of a default Item Folder. (See page 3, paragraph [0038] “The synchroniser can be set to ‘Recycle’ rather than delete files. This means that whenever the synchroniser is to overwrite or delete a file, the file is passed to the operating system to be ‘recycled’. This means it is not deleted immediately, but stored in an area where it can be retrieved if required.” In the instant application, the area in which the item is stored is called the default Item Folder.) It would have been obvious to one with ordinary skill in the art to combine the Item and Item folder system of Bristor, Nelson, and Moraes with the disclosure of a recycling method of

Edwards by simply adding the recycling method of Edwards to the system of Bristor, Nelson, and Moraes. Edwards points out the advantage of keeping the potentially deleted file (or in the instant application, the object,) available for future use rather than immediate deletion. It is for this reason that one of ordinary skill in the art would have been motivated to have each said Item, when each no longer belongs to any Item Folder, automatically become members of a default Item Folder.

Claim 11 :

Bristor, Nelson, and Moraes do not explicitly teach each said Item, when each is a member of only one Item Folder and said Item Folder is deleted, automatically become members of a default Item Folder. Nelson does disclose col. 5 lines 54-56, No folder exists matching these attributes. Consequently, the library server 25 creates a folder with the following attributes. However, Edwards teaches each said Item, when each is a member of only one Item Folder and said Item Folder is deleted, automatically become members of a default Item Folder. (See page 3, paragraph [0038] “The synchroniser can be set to ‘Recycle’ rather than delete files. This means that whenever the synchroniser is to over-write or delete a file, the file is passed to the operating system to be ‘recycled’. This means it is not deleted immediately, but stored in an area where it can be retrieved if required.” In the instant application, the area in which the item is stored is called the default Item Folder.) It would have been obvious to one with ordinary skill in the art to combine the Item and Item folder system of Bristor, Nelson, and Moraes with the disclosure of a recycling method of Edwards by simply adding the recycling method of Edwards to the system of Bristor, Nelson, and Moraes. Edwards points out the advantage of keeping the potentially

deleted file (or in the instant application, the object,) available for future use rather than immediate deletion. It is for this reason that one of ordinary skill in the art would have been motivated to have each said Item, when each is a member of only one Item Folder and said Item Folder is deleted, automatically become members of a default Item Folder.

14. Claims 13-20 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6018342 by David Bristor (hereafter Bristor) further in view of U.S. Patent 7158962 by Kenneth Nelson (hereafter Nelson), U.S. Patent Application Publication 20050033777 by Moraes et. al. (hereafter Moraes), and U.S. Patent 6578046 by Chang et. al. (hereafter Chang).

Claim 13 :

Bristor, Nelson, and Moraes do not explicitly disclose “The computer system of claim 1 wherein a category is defined by an Item property.” Nelson discloses col. 4 lines 60-62, automatic linking rules for that item type. These rules are stored in a separate table in the library server. However, Chang more explicitly teaches a Category is defined by an Item property. (See column 13, lines 26-30 “In the preferred embodiment, a FederatedCollection allows an application program to process data objects resulting from a query as a group or collection and at the same time preserves the sub-groupings relationships that exist between them.” Simply by the Category being formed as the result of a query, the Item property is necessarily what defined the Category, as the data must meet the Item property in order to be a result of the query.) It would have been obvious to one with ordinary skill in the art to combine the system as disclosed in Bristor, Nelson, and Moraes with the disclosure of Chang because it would be logical to use the Item property as

what defines the categories, especially in the case of a query. It is for this reason that one of ordinary skill in the art would have been motivated to have a Category is defined by an Item property.

Claim 14 :

Bristor, Nelson, and Moraes do not explicitly disclose “wherein one of said plurality of Categories is defined by an Item Property and only an Item comprising the Item property for a specific Category from among said plurality of Categories can be a member of said specific Category.” The combination of Bristor, Nelson, and Moraes disclose in Nelson col. 4 lines 60-62, automatic linking rules for that item type. These rules are stored in a separate table in the library server. However, Chang teaches more explicitly wherein one of said plurality of Categories is defined by an Item Property and only an Item comprising the Item property for a specific Category from among said plurality of Categories can be a member of said specific Category. (See column 13, lines 26-30 “In the preferred embodiment, a FederatedCollection allows an application program to process data objects resulting from a query as a group or collection and at the same time preserves the sub-groupings relationships that exist between them.” Simply by the Category being formed as the result of a query, the Item property is necessarily what defined the Category, as the data must meet the Item property in order to be a result of the query. Also, by the nature of queries only returning the results that are related, the only members of the Category will be from results that comprise the Item property.) It would have been obvious to one with ordinary skill in the art to combine the system as disclosed in Bristor, Nelson, and Moraes with the disclosure of Chang because it would be logical to use the

Item property as what defines the categories, especially in the case of a query. It is for this reason that one of ordinary skill in the art would have been motivated to have one of said plurality of Categories is defined by an Item property, and only an Item comprising the Item property for a specific Category from among said plurality of Categories can be a member of said specific Category.

Claim 15 :

Bristor, Nelson, and Moraes do not explicitly disclose an Item comprising the Item property for one of said plurality of Categories is automatically a member of that one of said plurality of Categories. However, Chang teaches an Item comprising the Item property for one of said plurality of Categories is automatically a member of that one of said plurality of Categories. (See column 13, lines 26-30 “In the preferred embodiment, a FederatedCollection allows an application program to process data objects resulting from a query as a group or collection and at the same time preserves the sub-groupings relationships that exist between them.” By the nature of queries only returning the results that are related, the only members of the Category will be from results that comprise the Item property. Here, all of the results of the query are included in on the collection [referred to in the instant application as a category].) It would have been obvious to one with ordinary skill the art to combine the system as disclosed in Bristor, Nelson, and Moraes with the disclosure of Chang because keeping the results of the query, all of which exhibit a relationship, is useful in that the query will not have to be run again. It is for this reason that one of ordinary skill in the art would have been motivated to include an Item

comprising the Item property for one of said plurality of Categories is automatically a member of that one of said plurality of Categories.

Claim 16 :

Bristor, Nelson, and Moraes do not explicitly disclose an Item comprising one or more Item properties corresponding to one or more Categories of said plurality of Categories is automatically a member of each such Categories for said corresponding Item properties. However, Chang teaches an Item comprising one or more Item properties corresponding to one or more Categories of said plurality of Categories is automatically a member of each such Categories for said corresponding Item properties. (See column 13, lines 26-30 “In the preferred embodiment, a FederatedCollection allows an application program to process data objects resulting from a query as a group or collection and at the same time preserves the sub-groupings relationships that exist between them.” By the nature of queries only returning the results that are related, the only members of the Category will be from results that comprise the Item property. Here, all of the results of the query are included in on the collection [referred to in the instant application as a category].) It would have been obvious to one with ordinary skill the art to combine the system as disclosed in Bristor, Nelson, and Moraes with the disclosure of Chang because keeping the results of the query, all of which exhibit a relationship, is useful in that the query will not have to be run again. It is for this reason that one of ordinary skill in the art would have been motivated to include an Item comprising one or more Item properties corresponding to one or more Categories of said plurality of Categories is automatically a member of each such Categories for said corresponding Item properties.

Claim 17 :

Bristor, Nelson, and Moraes do not explicitly disclose “wherein each of said plurality of categories is defined by an item property.” Nelson does disclose col. 4 lines 60-62, automatic linking rules for that item type. These rules are stored in a separate table in the library server. However, Chang more explicitly teaches each of said plurality of Categories is defined by an Item property. (See column 13, lines 26-30 “In the preferred embodiment, a FederatedCollection allows an application program to process data objects resulting from a query as a group or collection and at the same time preserves the sub-groupings relationships that exist between them.” Simply by the Category being formed as the result of a query, the Item property is necessarily what defined the Category, as the data must meet the Item property in order to be a result of the query.) It would have been obvious to one with ordinary skill in the art to combine the system as disclosed in Bristor, Nelson, and Moraes with the disclosure of Chang because it would be logical to use the Item property as what defines the categories, especially in the case of a query. It is for this reason that one of ordinary skill in the art would have been motivated to have each of said plurality of Categories is defined by an Item property.

Claim 18 :

Bristor, Nelson, and Moraes do not explicitly teach each of said plurality of Categories is defined by an Item property, and only Items comprising the Item property for a specific Category from among said plurality of Categories can be members of said specific Category. However, Chang

teaches each of said plurality of Categories is defined by an Item property, and only Items comprising the Item property for a specific Category from among said plurality of Categories can be members of said specific Category. (See column 13, lines 26-30 “In the preferred embodiment, a FederatedCollection allows an application program to process data objects resulting from a query as a group or collection and at the same time preserves the sub-groupings relationships that exist between them.” Simply by the Category being formed as the result of a query, the Item property is necessarily what defined the Category, as the data must meet the Item property in order to be a result of the query. Also, by the nature of queries only returning the results that are related, the only members of the Category will be from results that comprise the Item property.) It would have been obvious to one with ordinary skill the art to combine the system as disclosed in Bristol, Nelson, and Moraes with the disclosure of Chang because it would be logical to use the Item property as what defines the categories, especially in the case of a query. It is for this reason that one of ordinary skill in the art would have been motivated to have each of said plurality of Categories is defined by an Item property, and only Items comprising the Item property for a specific Category from among said plurality of Categories can be members of said specific Category.

Claim 19 :

Bristol, Nelson, and Moraes do not explicitly teach each Item comprising the Item property for one of said plurality of Categories are automatically members of that one of said plurality of Categories. However, Chang teaches each Item comprising the Item property for one of said plurality of Categories are automatically members of that one of said plurality of Categories.

(See column 13, lines 26-30 “In the preferred embodiment, a FederatedCollection allows an application program to process data objects resulting from a query as a group or collection and at the same time preserves the sub-groupings relationships that exist between them.” By the nature of queries only returning the results that are related, the only members of the Category will be from results that comprise the Item property. Here, all of the results of the query are included in on the collection [referred to in the instant application as a category].) It would have been obvious to one with ordinary skill the art to combine the system as disclosed in Bristol, Nelson, and Moraes with the disclosure of Chang because keeping the results of the query, all of which exhibit a relationship, is useful in that the query will not have to be run again. It is for this reason that one of ordinary skill in the art would have been motivated to include each Item comprising the Item property for one of said plurality of Categories are automatically members of that one of said plurality of Categories.

Claim 20 :

Bristol, Nelson, and Moraes do not explicitly teach all Items comprising one or more Item properties corresponding to one or more Categories of said plurality of Categories are automatically members of all such Categories for said corresponding Item properties. However, Chang teaches all Items comprising one or more Item properties corresponding to one or more Categories of said plurality of Categories are automatically members of all such Categories for said corresponding Item properties. (See column 13, lines 26-30 “In the preferred embodiment, a FederatedCollection allows an application program to process data objects resulting from a query as a group or collection and at the same time preserves the sub-groupings

relationships that exist between them.” By the nature of queries only returning the results that are related, the only members of the Category will be from results that comprise the Item property. Here, all of the results of the query are included in on the collection [referred to in the instant application as a category].) It would have been obvious to one with ordinary skill the art to combine the system as disclosed in Bristol, Nelson, and Moraes with the disclosure of Chang because keeping the results of the query, all of which exhibit a relationship, is useful in that the query will not have to be run again. It is for this reason that one of ordinary skill in the art would have been motivated to include all Items comprising one or more Item properties corresponding to one or more Categories of said plurality of Categories are automatically members of all such Categories for said corresponding Item properties.

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6018342 by David Bristol (hereafter Bristol) further in view of U.S. Patent 7158962 by Kenneth Nelson (hereafter Nelson), U.S. Patent Application Publication 20050033777 by Moraes et. al. (hereafter Moraes), and U.S. Patent 6438545 by Beauregard et. al. (hereafter Beauregard)

Claim 23 :

Bristol, Nelson, and Moraes do not explicitly disclose “a virtual machine manager”. However, Beauregard teaches said Item is a fundamental unit of information manipulated by a virtual machine manager. (See column 13, lines 12-16 “This broad I/O capability can be provided under the Virtual Machine Manager (VMM) that is available under Win32. The VMM is an extensible operating system whose core and standard components are provided by Microsoft

Corporation.”) Because of the advantages provided by VMM as taught in Beauregard, such as the broad I/O capability, it would have been obvious to one with ordinary skill in the art to combine the VMM of Beauregard with the teaching of Bristol, Nelson, and Moraes. It is for this reason that one of ordinary skill in the art would have been motivated to have said Item is a fundamental unit of information manipulated by a virtual machine manager.

16. Claims 40, 42, 46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6018342 by David Bristol (hereafter Bristol) further in view of U.S. Patent 7158962 by Kenneth Nelson (hereafter Nelson), U.S. Patent Application Publication 20050033777 by Moraes et. al. (hereafter Moraes), U.S. Patent Application Publication 2004/0199521 by Anglin et. al (hereafter Anglin) and U.S. Patent Application Publication 2004/0073560 by Edwards (hereafter Edwards).

Claim 40 :

Bristol, Nelson, Moraes, and Anglin do not explicitly teach said at least one Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder. However, Edwards teaches said Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder. (See page 3, paragraph [0038] “The synchroniser can be set to ‘Recycle’ rather than delete files. This means that whenever the synchroniser is to over-write or delete a file, the file is passed to the operating system to be ‘recycled’. This means it is not deleted immediately, but stored in an area where it can be retrieved if required.” In the instant application, the area in which the item is stored is called the

default Item Folder). It would have been obvious to one with ordinary skill in the art to combine the Item and Item folder system of Bristor, Nelson, Moraes, and Anglin with the disclosure of a recycling method of Edwards by simply adding the recycling method of Edwards to the system of Bristor, Nelson, Moraes, and Anglin. Edwards points out the advantage of keeping the potentially deleted file (or in the instant application, the object,) available for future use rather than immediate deletion. It is for this reason that one of ordinary skill in the art would have been motivated to have said Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder.

Claim 42 :

Bristor, Nelson, Moraes, and Anglin do not explicitly teach said at least one Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder. However, Edwards teaches said Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder. (See page 3, paragraph [0038] “The synchroniser can be set to ‘Recycle’ rather than delete files. This means that whenever the synchroniser is to over-write or delete a file, the file is passed to the operating system to be ‘recycled’. This means it is not deleted immediately, but stored in an area where it can be retrieved if required.” In the instant application, the area in which the item is stored is called the default Item Folder.) It would have been obvious to one with ordinary skill in the art to combine the Item and Item folder system of Bristor, Nelson, Moraes, and Anglin with the disclosure of a recycling method of Edwards by simply adding the recycling method of Edwards to the system of Bristor, Nelson, Moraes, and

Anglin. Edwards points out the advantage of keeping the potentially deleted file (or in the instant application, the object,) available for future use rather than immediate deletion. It is for this reason that one of ordinary skill in the art would have been motivated to have said Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder.

Claim 46 :

Bristor, Nelson, Moraes, and Anglin do not explicitly disclose “said at least one Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder.” However, Edwards teaches said Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder. (See page 3, paragraph [0038] “The synchroniser can be set to ‘Recycle’ rather than delete files. This means that whenever the synchroniser is to over-write or delete a file, the file is passed to the operating system to be ‘recycled’. This means it is not deleted immediately, but stored in an area where it can be retrieved if required.” In the instant application, the area in which the item is stored is called the default Item Folder) It would have been obvious to one with ordinary skill in the art to combine the Item and Item folder system of Bristor, Nelson, Moraes, and Anglin with the disclosure of a recycling method of Edwards by simply adding the recycling method of Edwards to the system of Bristor, Nelson, Moraes, and Anglin. Edwards points out the advantage of keeping the potentially deleted file (or in the instant application, the object,) available for future use rather than immediate deletion. It is for this reason that one of ordinary skill in the art would have been

motivated to have said Item, when it no longer belongs to any Item Folder, automatically becomes a member of a default Item Folder.

Claim 48 :

The combination of Bristol, Nelson, Moraes, and Anglin do not explicitly disclose “wherein said at least one item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder.” However, Edwards teaches said Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder. (See page 3, paragraph [0038] “The synchroniser can be set to ‘Recycle’ rather than delete files. This means that whenever the synchroniser is to over-write or delete a file, the file is passed to the operating system to be ‘recycled’. This means it is not deleted immediately, but stored in an area where it can be retrieved if required.” In the instant application, the area in which the item is stored is called the default Item Folder.) It would have been obvious to one with ordinary skill in the art to combine the Item and Item folder system of Bristol, Nelson, Moraes, and Anglin with the disclosure of a recycling method of Edwards by simply adding the recycling method of Edwards to the system of Bristol, Nelson, Moraes, and Anglin. Edwards points out the advantage of keeping the potentially deleted file (or in the instant application, the object,) available for future use rather than immediate deletion. It is for this reason that one of ordinary skill in the art would have been motivated to have said Item, when it is a member of only one Item Folder and said Item Folder is deleted, automatically becomes a member of a default Item Folder.

17. Applicant's arguments with respect to claims 1-11, 13-20, 23, and 37-48 have been considered but are moot in view of the new ground(s) of rejection.

A. Applicant's assert that Bristor does not disclose an "operating system that includes instructions for a database management program". That it has not been established how a software application that is installed on a computer uses the resources of an operating system when executing is a software application that is included within the operating system.

In response this is respectfully disagreed. Operating system does include instructions for a database management program. Figure 1B would not run without the unix operating system otherwise.

B. That Bristor does not disclose "instructions for a database management program integrated with instructions for a file system". That Bristor is silent as to whether a database can be an integral part of a file system. That there is no file system because Bristor doesn't even mention a file system.

In response, this is disagreed. A file system must exist in Bristor. As there commands that are run through out Bristor are directed towards manipulating files in directories.

The specifications is over 200 pages including drawings. In order to more clearly prosecute the claims, it is respectfully requested that in the next formal response by applicant to provide where support for each and every limitation in the specification for the non-original claims are.

Conclusion

18. The prior art made of record listed on pto-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

Contact Information

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PHAM whose telephone number is (571)272-3924. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. P./
Examiner, Art Unit 2167

/John R. Cottingham/
Supervisory Patent Examiner, Art Unit
2167

